

Amendments to the Drawings:

The attached sheets of drawings include formal versions of Figures 1A-17. These sheets, which include Figures 1A-17, replace the original sheets including Figures 1A-17.

Attachment: Replacement Sheets

REMARKS

The Official Action mailed March 5, 2007, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on September 22, 2003; January 4, 2005; February 24, 2005; August 22, 2005; December 12, 2005; and May 30, 2006.

Claims 1-14 and 16-32 are pending in the present application, of which claims 1 and 1-8 and 16 are independent. Claims 1-8 and 16 have been amended to better recite the features of the present invention. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Official Action rejects claims 1, 3, 5, 6 and 7 as anticipated by U.S. Patent Publication No. 2002/0056839 to Joo. The Applicant respectfully submits that an anticipation rejection cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP § 2131, to establish an anticipation rejection, each and every element as set forth in the claim must be described either expressly or inherently in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

In the present invention, an object to be treated (e.g. a semiconductor layer) is provided between a glass substrate and an island-like light-absorbing layer. A heat treatment for the object to be treated (e.g. the semiconductor layer) is performed by selectively heating a region where the island-like light-absorbing layer is formed, through the pulsed light irradiation. In independent claims 1 and 3, the island-like light-absorbing layer is formed over the semiconductor layer with an insulating layer interposed therebetween. In independent claims 5 and 7, the island-like light-absorbing

layer overlaps with the semiconductor layer through an insulating layer. In independent claim 6, the island-like light-absorbing layer is formed over an insulating layer that covers the semiconductor layer. The insulating layer as recited in claims 1, 3, 5, 6 and 7 corresponds, for example, to insulating layers 213 and 214 forming a gate insulating layer shown in Figure 7(A). Heat treatment using light irradiation is shown, for example, in Figure 7(B). The insulating layers 213 and 214 are patterned, for example, into the shapes designated with reference numbers 221 and 222 as shown in Figure 8(B). The insulating layer claimed in independent claims 1, 3, 5, 6 and 7 is patterned in a way that results in a configuration such as that shown, for example, in Figures 7(A) to 8(B). In order to further distinguish the present claims, independent claims 1, 3, 5, 6 and 7 have been amended to recite patterning a light-absorbing layer and an insulating layer to form a gate insulating layer between a semiconductor layer and a patterned light-absorbing layer after heat treatment. The Applicant respectfully submits that Joo, which discloses rapid thermal annealing (Figure 4F), does not teach the above-referenced features of the present invention, either explicitly or inherently.

Since Joo does not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102 are in order and respectfully requested.

The Official Action rejects claims 2, 4, 8, 11, 12, 16, 19, 20 and 23-32 as obvious based on Joo. The Official Action rejects claims 9, 10, 13, 14, 17, 18, 21 and 22 as obvious based on the combination of Joo and U.S. Patent No. 6,599,818 to Dairiki. The Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference

teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Please incorporate the arguments above with respect to the deficiencies in Joo. Dairiki does not cure the deficiencies in Joo. The Official Action relies on Dairiki to allegedly teach the features of the dependent claims. Specifically, the Official Action relies on Dairiki to allegedly teach a light absorbing layer made of metal nitride. However, Joo and Dairiki, either alone or in combination, do not teach or suggest the following features or that Joo should be modified to include any of the following features: patterning a light-absorbing layer and an insulating layer to form a gate insulating layer between a semiconductor layer and a patterned light-absorbing layer after heat treatment. Since Joo and Dairiki do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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